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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/727,957

12/04/2003

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36856.1158

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03/03/2005

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EXAMINER

HAM, SEUNGSOOK

ART UNIT

PAPER NUMBER

2817

DATE MAILED: 03/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

CA

<b>Office Action Summary</b>	<b>Application No.</b> 10/727,957	<b>Applicant(s)</b> UCHIDA ET AL.	
	<b>Examiner</b> Seungsook Ham	<b>Art Unit</b> 2817	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 February 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 6, 7 and 10-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8 and 9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/18/04, 12/4/03</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election without traverse of Species I, figures 1, 2, 9-15 in the reply filed on 2/18/05 is acknowledged.

Claims 6, 7, and 10-23 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Species II-IV, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 2/18/05.

It should be noted that claim 10 is related to non-elected species (see fig. 16), thus, claims 10, 11, 14, 16 and 17 are also withdrawn from the consideration. Moreover, claims 4 and 5 (see fig. 15) are related to the elected species, thus, these claims will be considered in this Office Action.

### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the subject matter of claim 8 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure

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is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 8, “the magnetic body includes a **hole**, which is filled with...and a resin” cannot be understood as to which embodiment shows such limitation. Moreover, “the magnetic body” lacks antecedent basis.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4, 5, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Kojima (JP 07-263280).

Kojima (figs. 1-4) discloses a noise filter comprising: a laminated body including magnetic layers 11-16, line conductors 23, 25, and ground conductors 32, 34, 36; one line conductor alternates with one ground conductor in lamination; with one ground ground conductor arranged on a top magnetic layer 32 and another ground conductor arranged on a bottom magnetic layer 36; and the line conductors disposed between the magnetic layers being serially connected; and the magnetic layer is made of a magnetic oxide (see English Translation, Detailed Description, paragraph [008]). The limitation, “causes little or no attenuation of an electrical signals...where the magnetic loss occurs” is inherent from the device of Kojima since such limitation is an inherent characteristic of a noise filter.

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Regarding claims 4 and 5, Kojima (fig. 1(a)) shows the line conductor has a spiral shape 23, 25 and coiled around a center axis aligned in the direction of lamination of the magnetic layers.

The subject matter of claim 9 is disclosed in paragraph [0015] (see English Translation, Detailed Description).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kojima (JP 07-263280).

The subject matter of claim 2 is considered as an obvious design modification to obtain a desired filter characteristic since Kojima teaches that the noise filter can be used in a broad frequency (see English Translation, Detailed Description, paragraph [0007]).

Using a line conductor having a meandering shape is considered as an obvious design modification since meandering shape inductor/conductor is well known in the art.

Claims 1-5 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto et al. (WO 03/001665) in view of Bodley et al. (US Pat. Appl. Publ. '967).

Yamamoto et al. (figs. 1, 2, 12-15, for English translation, see GB 2,383,198 A, cited by the applicant) discloses a noise filter 11 comprising: a laminated body including

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magnetic layers 12a-12n, line conductors 13-18 which has a spiral shape and coiled around a center axis aligned in the direction of lamination of the magnetic layers, and ground conductors 19; one line conductor alternates with one ground conductor in lamination; with one ground conductor arranged on a top magnetic layer 12b and another ground conductor arranged on a bottom magnetic layer 12n; and the line conductors disposed between the magnetic layers being serially connected. The limitation, "causes little or no attenuation of an electrical signals...where the magnetic loss occurs" is inherent from the device of Yamamoto et al. since such limitation is an inherent characteristic of a noise filter.

Yamamoto et al. is silent as to whether the magnetic layer is made of a magnetic oxide. However, Yamamoto et al. teaches that the magnetic sheets/layers are made of a ceramic material having a magnetic property such as ferrite or the like (see p. 15, 1-5). Thus, it is obvious that the magnetic oxide can be used as the magnetic layers in the device of Yamamoto et al. Moreover, Bodley et al. (fig. 2) discloses a similar noise filter having a plurality of magnetic layers are made of a magnetic oxide and also can be used a Ni-Cu-Zn ferrite (see paragraph [0009]).

It would have been obvious to one of ordinary skill in the art to use magnetic oxide layers as the magnetic layers in the device of Yamamoto et al. since Yamamoto et al. suggests using ceramic material with magnetic property and Bodley et al. teaches magnetic oxide layers broaden the attenuation frequency band of the filter device (see paragraphs [0007]-[0009]).

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Regarding claim 3, Yamamoto et al. also shows a line conductor has a meandering shape (fig. 16)

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kojima (JP 07-263280) in view of Kaneko et al. (US '931, insofar as understood).

Kojima does not show a hole filed with one of glass, a resin and a mixture of glass and resin. Insofar as understood, it is well known in the art to provide a protective layer to cover the noise filter. Kaneko et al. (fig. 2) discloses a conventional chip-type filter covered with a protective layer made of glass or resin. It would have been obvious to one of ordinary skill in the art to provide a protective layer (or hole) in the device of Kojima to protect the filter since such design technique is well known in the art as shown by Kaneko et al.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto et al. (WO 03/001665) in view of Bodley et al. (US Pat. Appl. Publ. '967) as applied to claim 1 above, and further in view of Kaneko et al. (US '931, insofar as understood).

The modified device of Yamamoto et al. does not show a hole filed with one of glass, a resin and a mixture of glass and resin. Insofar as understood, it is well known in the art to provide a protective layer to cover the noise filter. Kaneko et al. (fig. 2) discloses a conventional chip-type filter covered with a protective layer made of glass or resin. It would have been obvious to one of ordinary skill in the art to provide a protective layer (or hole) in the modified device of Yamamoto et al. to protect the filter since such design technique is well known in the art as shown by Kaneko et al.



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**Conclusion**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Yamamoto et al. (US '794) discloses a noise filter;

Tomohiro et al. (US '809) discloses a noise filter having inductors comprised of spiral electrodes; and Furutani et al. discloses a inductor having meandering shape.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Seungsook Ham whose telephone number is (571) 272-2405. The examiner can normally be reached on Monday-Thursday, 8:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on (571)-272-1769. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Seungsook Ham  
Primary Examiner  
Art Unit 2817

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